

(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

CCTGTCCCCG CCCCCCGGGC GGGCCGGGGG CGGGGTCCCG GCGGGGCGGA 50  
GCCATGCGCC CCCCCCTTT TTTTTTAAA AGTCGGCTGG TAGCGGGGAG 100  
GATCGCGGAG GCTTGGGGCA GCCGGGTAGC 130

(2) INFORMATION FOR SEQ ID NO:5:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 60 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

CTGACGGAGA GACAGACAGA CACCGCCCC AGCCCCAGCT ACCACCTCCT 50  
CCCCGGCCGG 60

(2) INFORMATION FOR SEQ ID NO:6:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 69 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TGCGCAGACA GTGCTCCAGC CGCGGCGCT CCCCAGGCC TGGCCCCGGC 50  
CTCGGGCCGG GGAGGAAGA 69

(2) INFORMATION FOR SEQ ID NO:7:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

AAAGTGT TTT ATATACGGTA CTTATTTAAT ATCCCTTTT AATTAGAAAT 50  
TAAACAGTT AATTTAATTA AAGATAGGGT TTTTTTCA 89

(2) INFORMATION FOR SEQ ID NO:8:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 62 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

TTTTTTAATT TTAATATTG TTATCATTTA TTTATTGGTG CTACTGTTTA 50  
TCCGTAATAA TT 62

(2) INFORMATION FOR SEQ ID NO:9:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 72 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

ATACATTTAT ATATATATAT ATTATATATA TATAAAATA AATATCTCTA 50  
TTTTATATAT ATAAAATATA TA 72

(2) INFORMATION FOR SEQ ID NO:10:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 89 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA

SUB  
D 2  
cont.

SUB  
D2  
Q1  
CONT

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:  
AAAGTGTTTT ATATACGGTA CTTATTTAAT ATCCCTTTT AATTAGAAAT  
TAAAACAGTT AATTTAATTA AAGATAGGGT TTTTTTCA

50  
89

- (2) INFORMATION FOR SEQ ID NO:11:  
(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 61 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA  
(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

TCTTAAAAA AAAAAAGCAT TTTGTATTAA AGAATTTAAT TCTGATCTCA  
AAGCTCCTCT T

50  
61

# SEQUENCE LISTING

## (1) GENERAL INFORMATION

(i) APPLICANT: Rakoczy et al.  
(ii) TITLE OF THE INVENTION: **HYALURONIC ACID AS DNA CARRIER FOR GENE THERAPY AND VEGF ANTISENSE DNA TO TREAT ABNORMAL RETINAL VASCULARIZATION**  
(iii) NUMBER OF SEQUENCES: 11  
(iv) CORRESPONDENCE ADDRESS:  
(A) ADDRESSEE: ARTER & HADDEN  
(B) STREET: 725 South Figueroa St, # 2400  
(C) CITY: Los Angeles  
(D) STATE: CA  
(E) COUNTRY: USA  
(F) ZIP: 90071  
(v) COMPUTER READABLE FORM:  
(A) MEDIUM TYPE: Diskette  
(B) COMPUTER: IBM Compatible  
(C) OPERATING SYSTEM: DOS  
(D) SOFTWARE: FastSEQ for Windows Version 2.0  
(vi) CURRENT APPLICATION DATA:  
(A) APPLICATION NUMBER: USSN 09/065,082  
(B) FILING DATE: 23-APR-1999  
(C) CLASSIFICATION:  
(vii) PRIOR APPLICATION DATA:  
(A) APPLICATION NUMBER: PCT AU96/00664  
(B) FILING DATE: 22-OCT-1996  
(viii) ATTORNEY/AGENT INFORMATION:  
(A) NAME: Amzel, Viviana  
(B) REGISTRATION NUMBER: 30,930  
(C) REFERENCE/DOCKET NUMBER: EPI-109  
(ix) TELECOMMUNICATION INFORMATION:  
(A) TELEPHONE: 213-430-3520  
(B) TELEFAX: 213-617-9255  
(C) TELEX:

## (2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:  
AGGAGAGCAG AAGTCCCAT 19

## (2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 19 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:  
CGTCAGAGAG CAACATCAC 19

## (2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 77 base pairs  
(B) TYPE: nucleic acid  
(C) STRANDEDNESS: single  
(D) TOPOLOGY: linear  
(ii) MOLECULE TYPE: cDNA

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:  
CCAGACTCCA CAGTGCATAC GTGGGCTCCA ACAGGTCCTC TTCCCTCCCA 50  
GTCAGTACT AACCCCGGAA CCACACA 77

## (2) INFORMATION FOR SEQ ID NO:4:

(i) SEQUENCE CHARACTERISTICS:  
(A) LENGTH: 130 base pairs

